

Inter-Service Provider LNP Operations Flows

Provisioning with LSR Figure 1

<u>Step</u>	<u>Description</u>
1. End-user Contact	<ul style="list-style-type: none">• The process begins with an end-user requesting service from the New Service Provider.• It is assumed that prior to entering the provisioning process the involved NPA/NXX was opened for porting.
2. End-user agrees to change to New Service Provider	<ul style="list-style-type: none">• End-user agrees to change to New Service Provider and requests retention of current telephone number / mobile directory number (TN/MDN)
3. New Service Provider obtains end-user Authorization	<ul style="list-style-type: none">• New Service Provider obtains authority from end-user to act as the official agent on behalf of the end-user. The New Service Provider is responsible for demonstrating necessary authority.
4. Is end-user porting all TN/MDN?	<ul style="list-style-type: none">• The New Service Provider determines if customer is porting all TN/MDN(s).• If yes, go to Step (6).• If no, go to Step (5).
5. New Service Provider notes “not all TN/MDN(s) being ported” in remarks field on LSR.	<ul style="list-style-type: none">• The New Service Provider makes a note in the remarks section of the LSR to identify whether the end-user is not porting all TN/MDN(s)
6. New Service Provider notifies Old Service Provider of change using Local Service Request (LSR).	<ul style="list-style-type: none">• The New Service Provider notifies the Old Service Provider of the porting using the LSR and sends the information via an electronic gateway, FAX, or other manual means. The LSR process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF). The information required on the LSR may vary based on the carriers involved.

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<u>Step</u>	<u>Description</u>
7. Old Service Provider provides Firm Order Confirmation (FOC) to New Service Provider.	<ul style="list-style-type: none">• The minimum expectation for wireline to wireline and wireless to wireline is that the FOC is returned within 24 hours excluding weekends unless otherwise defined by inter-company agreements. It is the responsibility of the Old Service Provider to contact the New Service Provider if the Old Service Provider is unable to meet the 24 hours expectation for transmitting the FOC. If the FOC is not received by the New Service Provider within 24 hours, then the New Service Provider contacts the Old Service Provider.• The minimum expectation for wireless to wireless is that the FOC is returned within 30 minutes excluding Sunday unless otherwise defined by inter-company agreements. It is the responsibility of the Old Service Provider to contact the New Service Provider if the Old Service Provider is unable to meet the 30 minutes expectation for transmitting the FOC. If the FOC is not received by the New Service Provider within 30 minutes, then the New Service Provider contacts the Old Service Provider.

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<u>Step</u>	<u>Description</u>
	<ul style="list-style-type: none"> • For wireline to wireline and for wireless to wireline the FOC due date is no earlier than three (3) business days after the FOC receipt date. • For wireless to wireless the FOC due date is no earlier than two (2) business hours after the FOC receipt date. • <i>For wireline to wireless the FOC and LSR timeframes are TBD</i> • The due date of the first TN/MDN ported in an NPA-NXX is no earlier than five (5) business days after FOC receipt date. It is assumed that the porting interval is not in addition to intervals for other requested services related to the porting (e.g., unbundled loops). The interval becomes the longest single interval required for the services requested. • The FOC process is defined by the OBF and the electronic interface by the TCIF.
8. Old and New Service Providers create and process service orders.	<ul style="list-style-type: none"> • Upon completion of the LSR and FOC process, the Service Providers create and process their service orders through their internal service order systems, from the information provided on the LSR and FOC.
9. Old (optionally) and New Service Providers notify NPAC SMS.	<ul style="list-style-type: none"> • Due date on the create message is the due date on the FOC. Where wireline due date equals date and wireless due date equals date and time. For wireless to wireline the wireline due date applies. <i>For wireline to wireless due date is TBD.</i> Any change of due date to the NPAC SMS is the result of a change in the FOC due date. • Service Providers enter subscription data into NPAC SMS via SOA interface (i.e., the SOA association, LTI, or contacting the NPAC personnel) for porting of end-user in accordance with the NANC Functional Requirements Specification (FRS) and the NANC Interoperability Interface Specifications (IIS).

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<u>Step</u>	<u>Description</u>
10. NPAC SMS performs data validation on each individual message.	<ul style="list-style-type: none"> NPAC SMS validates data to ensure value formats and consistency as defined in the FRS. This is not a comparison between Old and New Service Provider messages.
11. Is data valid?	<ul style="list-style-type: none"> If yes, go to Step (14). If this is the first valid create message, the t_1 timer is started. If no, go to Step (12).
12. Return data to Service Provider.	<ul style="list-style-type: none"> If the data is not valid, the NPAC SMS returns notification to the Service Provider for correction.
13. Data corrected and forwarded.	<ul style="list-style-type: none"> The Service Provider, upon notification from the NPAC SMS, corrects the data and forwards back to NPAC SMS.
14. Did NPAC SMS receive both and matching create messages within the limits of the t_1 Timer.	<ul style="list-style-type: none"> The value for the t_1 Timers are configurable for Service Providers. Service Providers will use either long or short timers. The current default for the long timer is nine (9) hours. The current default for the short timer is one (1) hour. If matching, go to Step (17). If mismatched, go to Step (15). If t_1 timer expires, go to Step (16). NPAC SMS processing timers include business hours only, except where otherwise specified. Local business hours are defined as 12 hours. Monday through Friday is the default for Short Business Days and Monday through Saturday is the default for Long Business Days, except holidays. Holidays and business hours are defined for each NPAC Region. <i>See Change orders and update for override statement (jpm).</i>
15. NPAC SMS notifies appropriate Service Provider that information is mismatched.	<ul style="list-style-type: none"> The NPAC SMS informs the Service Provider that sent the second create that the messages are mismatched. If necessary, the Service Provider notified coordinates the correction.

Inter-Service Provider LNP Operations Flows

Provisioning with LSR Figure 1

<u>Step</u>	<u>Description</u>
16. NPAC SMS notifies appropriate Service Provider that the create message is missing.	<ul style="list-style-type: none"> • If Service Providers do not notify the NPAC SMS and/or provide matching data within the T1 timer, the NPAC SMS sends a notification to the Service Provider who did not respond to the Subscription version create message. • The NPAC SMS provides an Initial Concurrence Window tunable parameter (t_1) defined as the number of hours after the subscription version was initially created by which both Service Providers can authorize transfer of subscription service. • The t_2 timer starts.
17. Did Old Service Provider place order in Conflict.	<ul style="list-style-type: none"> • If yes, go to Step (25). • If no, go to Step (18). • Check Concurrence Flag Yes or No. If no, a conflict cause code as defined in the FRS, is designated. Old Service Provider makes a concerted effort to contact New Service Provider prior to placing subscription in conflict. The timeframe in which the OLD SP could place an SV into conflict would be the later of 12:00 noon the date before the due date or the expiration of the T2 timer.
18. New Service Provider coordinates physical changes with Old Service Provider.	<ul style="list-style-type: none"> • The New Service Provider has the option of requesting a coordinated order. This is the re-entry point from the Inter-Service Provider LNP Operations Flows – Conflict Flow for the Service Creation Provisioning Process tie point BB.

Inter-Service Provider LNP Operations Flows

Provisioning with LSR Figure 1

<u>Step</u>	<u>Description</u>
	<ul style="list-style-type: none"> If coordination is requested on the LSR, an indication of yes or no for the application of a 10-digit trigger is required. If no coordination indication is given, then by default, the 10-digit trigger is applied as defined in inter-company agreements. If the New Service Provider requests a coordinated order and specifies 'no' on the application of the 10-digit trigger, the Old Service Provider uses the 10-digit trigger at its discretion.
19. Does NPAC SMS receive create message within the limits of the t2 Timer.	<ul style="list-style-type: none"> The NPAC SMS provides a Final Concurrence Window tunable parameter (t_2). T2 is defined as the number of hours after the concurrence request is sent by the NPAC SMS. The value for the t2 Timers are configurable for Service Providers. Service Providers will use either long or short timers. The current default for the long timer is nine (9) hours. The current default for the short timer is one (1) hour. NPAC SMS processing timers include business hours only, except where otherwise specified. Local business hours are defined as 12 hours. Monday through Friday is the default for Short Business Days and Monday through Saturday is the default for Long Business Days, except holidays. Holidays and business hours are defined for each NPAC Region. If create messages match, go to Step (17). If t_2 timer expires, go to Step (20). If create messages are mismatched they will be processed in the same manner as Step (15).
20. Is create message missing from New or Old Service Provider?	<ul style="list-style-type: none"> If New Service Provider, go to Step (21). If Old Service Provider, go to Step (23).
21. NPAC logs no response.	<ul style="list-style-type: none"> The NPAC records that no matching create message was received from the New Service Provider.

Inter-Service Provider LNP Operations Flows

Provisioning with LSR Figure 1

<u>Step</u>	<u>Description</u>
22. NPAC notifies both Service Providers that transaction is cancelled and change is rejected.	<ul style="list-style-type: none"> The subscription version is immediately cancelled by NPAC SMS. Both Service Providers take appropriate action related to internal work orders.
23. NPAC notifies Old Service Provider that porting proceeds under control of New Service Provider.	<ul style="list-style-type: none"> A notification message is sent to the Old Service Provider noting that the porting is proceeding in the absence of any message from the Old Service Provider.
24. Is the Unconditional 10-Digit Trigger being used?	<ul style="list-style-type: none"> If yes, go to Inter-Service Provider LNP Operations Flows - Provisioning with Unconditional 10-Digit Trigger - tie point AA. If no, go to Inter-Service Provider LNP Operations Flows - Provisioning without Unconditional 10-digit Trigger - tie point A.
	<ul style="list-style-type: none"> The unconditional 10-digit trigger is an option assigned to a line on a donor switch during the transition period when the line is physically moved from donor switch to recipient switch. During this period it is possible for the TN/MDN to reside in both donor and recipient switches at the same time. The unconditional 10-digit trigger may be applied by the New Service Provider.
25. NPAC logs request to place order into Conflict including conflict cause code.	<ul style="list-style-type: none"> Go to Inter-Service Provider LNP Operations Flows - Conflict Flow for the Service Creation Provisioning Process - tie point B.
26. END	

Inter-Service Provider LNP Operations Flows

Provisioning Without Unconditional 10-Digit Trigger Figure 2 Flow A

<u>Step</u>	<u>Description</u>
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NOTE: Steps 1 and 2 are worked concurrently.

1. New Service Provider activates (locally)	<ul style="list-style-type: none"> The Wireline New Service Provider activates its own Central Office translations. The Wireless New Service Provider activates its own switch/HLR configuration including assignment of Mobile Station Identifier (MSID).
2. Old and New Service Providers make physical changes (where necessary).	<ul style="list-style-type: none"> Wireline physical changes may or may not be coordinated. Coordinated physical changes are based on inter-connection agreements. Mobile Station (handset) changes are completed. The New Service Provider is now providing dial tone to ported end user.
3. New Service Provider notifies NPAC to activate subscription.	<ul style="list-style-type: none"> The New Service Provider sends an activate message to the NPAC SMS via the SOA. No NPAC subscription version may activate before the subscription version due date.
NOTE: Steps 4, 5, 6, and 7 may be concurrent, but at a minimum should be completed ASAP.	
4. NPAC SMS Downloads (real time) to all Service Providers.	<ul style="list-style-type: none"> The NPAC SMS broadcasts new subscription data to all Service Providers LSMS in the serving area in accordance with the NANC FRS and NANC IIS. The Service Control Point (SCP) Applications and GTT Function for Number Portability requirements are defined by T1S1.6.
5. NPAC SMS records date and time in history file.	<ul style="list-style-type: none"> The NPAC SMS records the current date and time as the Activation Date and Time stamp, after all Local SMSs have successfully acknowledged receipt of new subscription version.

Inter-Service Provider LNP Operations Flows

Provisioning Without Unconditional 10-Digit Trigger Figure 2 Flow A

Step	Description
6. Wireline Old Service Provider removes translations in Central Office. Wireless Old Service Provider removes subscriber from switch/HLR.	<ul style="list-style-type: none">• The Wireline Old Service Provider initiates the removal of translation either at designated Due Date and Time or, if the order was designated as coordinated, upon receipt of a call from the New Service Provider.• The Wireless Old Service Provider initiates the removal of the subscriber record from the switch/HLR after the activation of the port.
7. NPAC SMS logs failures and non-responses and notifies the Old and New Service Providers of failures.	<ul style="list-style-type: none">• The NPAC SMS resends the activation to a Local SMS that did not acknowledge receipt of the request. The number of NPAC SMS attempts to resend is a tunable parameter for which the current default is three (3) attempts. Once this cycle is completed NPAC personnel investigate possible problems. In addition, the NPAC sends a notice via SOA interface to both the Old and New Service Providers with a list of Local SMSs that failed activation.
8. All Service Providers update routing databases (real time download).	<ul style="list-style-type: none">• This is an internal process and is performed in accordance with the Service Control Point (SCP) Applications and GTT Function for Number Portability requirements as defined by T1S1.6.
9. New Service Provider may verify completion.	<ul style="list-style-type: none">• The New Service Provider may make test calls to verify that calls to ported numbers complete as expected.
10. END	

Inter-Service Provider LNP Operations Flows

Provisioning With Unconditional 10-Digit Trigger Figure 3 Flow AA

Step	Description
1. Old Service Provider activates unconditional 10-digit trigger in Central Office.	<ul style="list-style-type: none"> The actual time for trigger activation is defined on a regional basis. The unconditional 10-digit trigger may optionally be applied by the New Service Provider.
NOTE: Steps 2 and 3 may be worked concurrently.	
2. New Service Provider activates Central Office translations.	<ul style="list-style-type: none"> The New Service Provider activates their own Central Office translations.
3. Old and New Service Providers make physical changes (where necessary).	<ul style="list-style-type: none"> Any physical work or changes are made by either Old or New Service Providers as necessary. Physical changes may or may not be coordinated. Coordinated physical changes are based on inter-connection agreements.
4. New Service Provider notifies NPAC SMS to activate subscription.	<ul style="list-style-type: none"> The New Service Provider sends an activate message via the SOA interface to the NPAC SMS. No NPAC subscription version may activate before the Subscription Version due date.
NOTE: Steps 5, 6, and 7 may be concurrent, but at a minimum should be completed ASAP.	
5. NPAC SMS Downloads (real time) to all Service Providers.	<ul style="list-style-type: none"> The NPAC SMS broadcasts new subscription data to all Service Providers in the serving area in accordance with the NANC FRS and NANC IIS. The Service Control Point (SCP) Applications and GTT Function for Number Portability requirements are defined by T1S1.6.
6. NPAC SMS records date and time in history file.	<ul style="list-style-type: none"> The NPAC SMS records the current date and time as the Activation Date and Time stamp, after all Local SMSs successfully acknowledged receipt of new subscription version.

Inter-Service Provider LNP Operations Flows

Provisioning With Unconditional 10-Digit Trigger Figure 3 Flow AA

Step	Description
7. NPAC SMS logs failures and non-responses and notifies the Old and New Service Providers of failures.	<ul style="list-style-type: none">• The NPAC SMS resends the activation to a Local SMS that did not acknowledge receipt of the request. The number of NPAC SMS attempts to resend is a tunable parameter for which the current default is three (3) attempts. Once this cycle is completed NPAC personnel investigate possible problems. In addition, the NPAC sends a notice via SOA interface to both the Old and New Service Providers with a list of Local SMSs that failed activation.
8. All Service Providers update routing databases (real time download).	<ul style="list-style-type: none">• This is an internal process and is performed in accordance with the Service Control Point (SCP) Applications and GTT Function for Number Portability requirements as defined by T1S1.6.
9. Old Service Provider removes appropriate translations.	<ul style="list-style-type: none">• After update of its databases the Old Service Provider removes translations associated with the ported TN/MDN. The specific time for removal may be specified on a regional basis.
10. New Service Provider may verify completion.	<ul style="list-style-type: none">• The New Service Provider may make test calls to verify that calls to ported numbers complete as expected.
11. END	

Inter-Service Provider LNP Operations Flows

Conflict Flow for the Service Creation Provisioning Process
Figure 4
Flow B

Step	Description
1. Tie-point (B)	<ul style="list-style-type: none"> The conflict flow is entered through the Provisioning process flow (Figure 1) through tie point (B), when the Old Service Provider enters a concurrence flag of “No”, and designates a conflict cause code.
2. Is conflict restricted?	<ul style="list-style-type: none"> Conflict is restricted (i.e., SV may not be placed into conflict) if either: <ul style="list-style-type: none"> The Old Service Provider has previously placed the subscription into conflict or the request was initiated after the noon the business day before Due Date and T2 timer has expired? If yes, go to Step (4). If no, go to Step (3).
3. NPAC changes subscription to Conflict Status and notifies both Service Providers.	<ul style="list-style-type: none"> Both Service Providers take appropriate action related to internal work orders. Subscriptions may be modified while in the conflict state (e.g., due date).
4. NPAC rejects conflict request.	<ul style="list-style-type: none"> NPAC notifies Service Provider of rejection. Proceed to tie point BB on the Provisioning flow (Figure 1).
5. New Service Provider contacts the Old Service Provider to resolve Conflict. If no agreement is reached, begin normal escalation.	<ul style="list-style-type: none"> The escalation process is defined in the inter-company agreements.
6. Was conflict resolved within 30 calendar days?	<ul style="list-style-type: none"> From the time a subscription is placed in conflict, there is a 30 calendar day limit after which it is removed from the NPAC database. If it is resolved within the 30 calendar day limit, proceed to Step (8); if not, the subscription request will “time out” and proceed to Step (11).

Inter-Service Provider LNP Operations Flows

Conflict Flow for the Service Creation Provisioning Process Figure 4 Flow B

Step	Description
7. How was Conflict resolved?	<ul style="list-style-type: none"> Conflict resolution initiates one of two actions: 1) cancellation of the subscription, or 2) resumption of the service creation provisioning process. If the conflict is resolved by cancellation of the subscription, then proceed to the Cancellation Flows for Provisioning Process (Figure 5) through tie point C. If the conflict is otherwise resolved, proceed to Step (9).
8. If conflict was resolved within six (6) business hours, only the Old Service Provider may notify NPAC of “conflict off”. If conflict was resolved after six (6) hours, either the New or Old Service Provider may notify NPAC of “conflict off”.	<ul style="list-style-type: none"> In order for the porting process to continue at least one Service Provider must remove the subscription from conflict.
9. NPAC SMS notifies both Service Providers of conflict off via SOA or LTI.	<ul style="list-style-type: none"> NPAC SMS notifies both Service Providers of the change in subscription status. The porting process resumes as normal, proceeding to the Provisioning process flow (Figure 1) at tie point BB.
10. NPAC SMS initiates cancellation and notifies Service Providers.	<ul style="list-style-type: none"> NPAC SMS notifies both Service Providers that the subscription version status was updated to <i>cancelled</i>. Both Service Providers take appropriate action related to internal work orders.
12. END	

Cancellation Flows for Provisioning Process Figure 5

Introduction

A service order and/or subscription may be cancelled through the following processes:

- The end-user contacts the Old or New Service Provider and requests cancellation of their porting request.
- Conflict Flow for the Service Creation Provisioning Process - Figure 4: As a result of the Conflict Resolution process (at tie-point C) the Old and New Service Providers agree to cancel the subscription and applicable service orders.

Step	Description
1. End-user	<ul style="list-style-type: none">• The Cancellation Process may begin with an end-user requesting cancellation of their pending port. The Cancellation process flow applies only to that period of time between subscription creation, and either activation or cancellation of the porting request. If activation completed and the end-user wishes to revert back to the former Service Provider, it is accomplished via the Provisioning Process.
2. Did end-user contact Old or New Service Provider?	<ul style="list-style-type: none">• The end-user contacts either the Old or New Service Provider to cancel the porting request. Only the Old or New Service Provider can initiate this transaction, not another Service Provider.• The contacted Service Provider gathers information necessary for sending the LSR to the other Service Provider noting cancellation, and for sending the cancellation request to NPAC SMS.• If the end-user contacted the Old Service Provider, then proceed to Step (3).• If the end-user contacted the New Service Provider, proceed to Step (6).

Inter-Service Provider LNP Operations Flows

Cancellation Flows for Provisioning Process Figure 5

Step	Description
3. Old Service Provider obtains end-user authorization.	<ul style="list-style-type: none">• The Old Service Provider obtains actual authority from the end-user to act as the official agent on behalf of the end-user to cancel the porting request. The Old Service Provider is responsible for demonstrating such authority as necessary.
4. Old Service Provider sends notification to New Service Provider	<ul style="list-style-type: none">• The Old Service Provider notifies the New Service Provider, via their inter-company interface, indicating that the porting request is to be cancelled.
5. Old Service Provider sends cancellation to NPAC, if appropriate	<ul style="list-style-type: none">• The Old Service Provider, contacted directly by the end-user or notified by the New Service Provider via their inter-company interface, sends a cancellation message to NPAC via the SOA interface. This cancellation message is accepted by NPAC SMS only if the Old Service Provider had previously uploaded during the subscription creation. If the Old Service Provider sends a cancellation message and a create message was not previously sent, the NPAC responds with a reject message. If the Old Service Provider does not upload a create message to the NPAC SMS for this subscription, it cannot subsequently send a cancellation message.• The Old Service Provider takes appropriate action related to internal work orders.
6. New Service Provider sends LSR to Old Service Provider noting cancellation as soon as possible prior to activation time	<ul style="list-style-type: none">• The end-user contacts the New Service Provider to cancel the porting request. The New Service Provider fills out and sends the LSR form to the Old Service Provider via their inter-company interface, indicating cancellation of the porting request.

Inter-Service Provider LNP Operations Flows

Cancellation Flows for Provisioning Process Figure 5

Step	Description
7. New Service Provider sends cancellation to NPAC, if appropriate	<ul style="list-style-type: none">• The New Service Provider, contacted directly by the end-user or notified by the Old Service Provider via their inter-company interface, sends a cancellation message to NPAC via the SOA interface. This cancellation message is accepted by NPAC SMS only if the New Service Provider previously uploaded during the subscription creation. If the New Service Provider sends a cancellation message and a create message was not previously sent, the NPAC responds with a reject message. If the New Service Provider did not upload a create message to the NPAC SMS for this subscription, it cannot subsequently send a cancellation message.• The New Service Provider takes appropriate action related to internal work orders.
8. Did NPAC receive notification(s) within tunable parameter?	<ul style="list-style-type: none">• The NPAC applies a nine (9) business hour [tunable parameter] time limit on receiving cancellation messages from both Service Providers. This is referred to as the Initial Cancellation Window.• NPAC SMS processing timers include business hours only, except where otherwise specified.

Cancellation Flows for Provisioning Process
Figure 5

<u>Step</u>	<u>Description</u>
	<p>hours only, except where otherwise specified. Local business hours are defined as 12 hours. Monday through Friday is the default for Short Business Days and Monday through Saturday is the default for Long Business Days, except holidays. Holidays and business hours are defined for each NPAC Region.</p> <ul style="list-style-type: none"> • The NPAC SMS tests for receipt of cancellation messages from the two Service Providers based on which Service Provider had previously uploaded into NPAC SMS. Since the Old Service Provider's upload is optional for subscription creation, if the Old Service Provider did not upload during the creation process, the Old Service Provider's input during cancellation is not accepted by NPAC SMS. Similarly, if during the subscription creation process only the Old Service Provider uploaded, and not the New Service Provider, only the Old Service Provider's input is accepted when canceling an order. • For a "concurrent" subscription, when the first cancellation message is received, NPAC sets the subscription status to <i>cancel-pending</i>. Both the Old and New Service Providers are notified of this change in status via the SOA interface. • If the second cancellation notification, from the other Service Provider, is received within nine (9) business hours, proceed to Step (11). • If the second cancellation notification from the other Service Provider is not received within nine (9) business hours, proceed to Step (9). • For a "non-concurrent" subscription, when the first cancellation message is received, NPAC sets the subscription status directly to <i>cancel</i>, and proceeds to Step (11). Both the Old and New Service Providers are notified of this change in status via the SOA interface. •

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Cancellation Flows for Provisioning Process Figure 5

<u>Step</u>	<u>Description</u>
9. NPAC notifies appropriate Service Provider that information is missing	<ul style="list-style-type: none"> The Initial Cancellation Window starts with receipt of the first cancellation message at NPAC. When this timer times out, the NPAC requests the missing information from the Service Provider who did not provide the cancellation message via the SOA interface. Only “concurrent” subscriptions reach this point in the process flow.
10. Does NPAC receive concurring notification within nine (9) business hours?	<ul style="list-style-type: none"> The NPAC applies a nine (9) business hours [tunable parameter] time limit on receiving cancellation messages from both Service Providers. This is referred to as the Final Cancellation Window. NPAC SMS processing timers include business hours only, except where otherwise specified. Local business hours are defined as 12 hours. Monday through Friday is the default for Short Business Days and Monday through Saturday is the default for Long Business Days, except holidays. Holidays and business hours are defined for each NPAC Region. Upon receipt of the concurring notification, proceed to Step (11). If no notification is received by the time this timer times out, proceed to tie-point H, “Cancellation Conflict Process Flow.”
11. NPAC logs information, cancels subscription, and notifies both Service Providers of cancellation	<ul style="list-style-type: none"> The porting request is cancelled by changing the subscription status to <i>cancelled</i>. Both Service Providers are notified of the cancellation via the SOA interface.
12. END	

Inter-Service Provider LNP Operations Flows

Cancellation Conflict Flows for Provisioning Process Figure 6

Step	Description
1. Is Old or New Service Provider cancellation notification missing or inaccurate?	<ul style="list-style-type: none"> • At this point in the process flow, the subscription status is <i>cancel pending</i>, because either the Old or New Service Provider's cancellation notification is missing or inaccurate (i.e., mismatched). • If the Old Service Provider's notification is at fault, then proceed to Step (2). • If the New Service Provider's notification is at fault, then proceed to Step (3).
Note that the Cancellation Conflict process flow is reached only for "concurrent" subscriptions.	
2. NPAC logs information, cancels subscription, and notifies both Service Providers of cancellation with proper cause code	<ul style="list-style-type: none"> • If the Old Service Provider does not provide a cancellation notification message to NPAC, in spite of a Cancellation LSR from the New Service Provider and two reminder messages from NPAC, the subscription is cancelled. NPAC notifies both Service Providers via the SOA interface, that the subscription status is updated to <i>cancelled</i>, and places the proper cause code on the subscription record. • Both Service Providers take appropriate action related to internal work orders.
3. NPAC logs information, places subscription in "conflict status" with proper conflict cause code, and notifies both Service Providers	<ul style="list-style-type: none"> • If the New Service Provider does not provide a cancellation notification message to NPAC, in spite of a Cancellation LSR from the Old Service Provider and a reminder message from NPAC, the subscription is placed in a <i>conflict</i> state. NPAC also writes the proper conflict cause code to the subscription record, and notifies both Service Providers, with proper conflict cause code, of the change in status via the SOA interface. • Both Service Providers take appropriate action related to internal work orders.

Inter-Service Provider LNP Operations Flows

Cancellation Conflict Flows for Provisioning Process Figure 6

Step	Description
4. How does New Service Provider wish to continue?	<ul style="list-style-type: none">• With the subscription in <i>conflict</i>, it is only the New Service Provider who controls the transaction. The New Service Provider makes a concerted effort to contact the Old Service Provider prior to proceeding.• If the New Service Provider decides to cancel the subscription, proceed to Step (5).• If the New Service Provider decides to proceed with the porting process, go to Step (8).• If the New Service Provider decides to ignore, proceed to Step (7).
5. New Service Provider notifies NPAC to cancel subscription	<ul style="list-style-type: none">• The New Service Provider may decide to cancel the subscription. If so, they notify NPAC of this decision via the SOA interface.
6. NPAC logs information, cancels subscription and notifies both Service Providers of cancellation	<ul style="list-style-type: none">• Following notification by the New Service Provider to cancel the subscription, NPAC logs this information, and changes the subscription status to <i>cancelled</i>. Both Service Providers are notified of the change in the subscription status via the SOA interface.• Both Service Providers take appropriate action related to internal work orders
7. NPAC waits for 30 calendar days, cancels subscription, and notifies both Service Providers of time-out.	<ul style="list-style-type: none">• After no response from the New Service Provider for 30 calendar days regarding this particular subscription, NPAC changes the status to <i>cancelled</i> and notifies both Service Providers of the change in status via the SOA interface.• Both Service Providers take appropriate action related to internal work orders.

Inter-Service Provider LNP Operations Flows

Cancellation Conflict Flows for Provisioning Process Figure 6

Step	Description
8. New Service Provider notifies NPAC to remove subscription from Conflict status	<ul style="list-style-type: none">• The New Service Provider may choose to proceed with the porting process, in spite of a cancellation message from the Old Service Provider. As both Service Providers are presumably basing their actions on the end-user's request, and each is apparently getting a different request from that end-user, each should ensure the accuracy of the request.• If the New Service Provider decides to proceed with the porting, they update the status of the subscription to <i>pending</i> via the SOA interface.• It is the responsibility of the New Service Provider to contact the Old Service Provider, to request that related work orders which support the porting process are performed. The Old Service Provider must support the porting process.
9. NPAC notifies both Service Providers of conflict off via SOA	<ul style="list-style-type: none">• NPAC notifies both Service Providers of the change in subscription status. The porting process resumes as normal, at tie-point BB.
10. END	

Inter-Service Provider LNP Operations Flows

Disconnect Process for Ported TN/MDN(s) Figure 7

Step	Description
1. End-user calls current Service Provider to disconnect service.	<ul style="list-style-type: none"> The end user provides disconnect date and negotiates intercept treatment with current Service Provider.
2. Current Service Provider initiated disconnect	<ul style="list-style-type: none"> Current Service Provider initiates disconnect of service based on regulatory authority(s)
3. Current Service Provider arranges intercept treatment	<ul style="list-style-type: none"> Current Service Provider arranges intercept treatment as negotiated with the end user, or, when the disconnect is Service Provider initiated, per internal processes.
4. Current Service Provider creates and processes service order	<ul style="list-style-type: none"> Current Service Provider follows existing internal process flows to ensure the disconnect within its own systems.
5. Current Service Provider notifies NPAC of disconnect date ¹ and indicates effective release date ²	<ul style="list-style-type: none"> Current Service Provider notifies NPAC of disconnect date via the SOA interface and indicates effective release date, which defines when the broadcast occurs. If no effective release date is given, the broadcast from NPAC/SMS is immediate. The maximum interval between disconnect date and effective release date is 18 months.
6. NPAC notifies NPA/NXX owner/holder of the disconnected TN/MDNs effective release and disconnect dates	<ul style="list-style-type: none"> On effective release date, NPAC notifies NPA/NXX owner/holder of the disconnected TN/MDN(s), effective release and disconnect dates via the SOA.
7. NPAC broadcasts subscription deletion to all applicable Service Providers	<ul style="list-style-type: none"> On effective release date, NPAC broadcasts subscription deletion to all applicable Service Providers via LSMS
8. NPAC deletes TN/MDN(s) from active database on effective release date	<ul style="list-style-type: none"> On effective release date, NPAC/SMS removes number from its database.
9. END	

¹ Disconnect Date: Date the telephone number or numbers are no longer associated between an end user and the current Service Provider.

² Effective Release Date: Date the telephone number reverts back to NPA/NXX holder/owner.

Inter-Service Provider LNP Operations Flows

Audit Process
Figure 8

Step	Description
1. Service Provider requests NPAC for audit.	<ul style="list-style-type: none">• A Service Provider may request an audit to assist in resolution of a repair problem reported by an end-user. Prior to the audit request, the Service Provider completes internal analysis as defined by company procedures and, if another Service Provider is involved, attempts to jointly resolve the trouble in accordance with inter-company agreements. Failure to resolve the trouble following these activities, the Service Provider requests an audit.
2. NPAC SMS issues queries to appropriate LSMSs.	<ul style="list-style-type: none">• The NPAC SMS issues queries to the Local SMSs (LSMS) involved in the customer port.
3. NPAC SMS compares own Subscription Version to LSMS Subscription Version	<ul style="list-style-type: none">• Upon receipt of the LSMS Subscription Version, the comparison of the NPAC SMS and LSMS Subscription Versions is made to determine if there are discrepancies between the two databases.
4. NPAC SMS updates appropriate LSMS with Subscription Version updates.	<ul style="list-style-type: none">• If inaccurate routing data is found, the NPAC SMS broadcasts the correct subscription data to any involved Service Provider's networks to correct inaccuracies.
5. All audits completed	<ul style="list-style-type: none">• If no, return to Step (4).• If yes, proceed to Step (6).
6. NPAC reports audit completion to requesting Service Provider	<ul style="list-style-type: none">• NPAC reports to the requesting Service Provider following completion of the audit to allow the Service Provider to close the trouble ticket.• Upon request, NPAC provides ad hoc reports to Service Providers that wish to determine which Service Providers are launching audit queries to their LSMS.
7. END	

Inter-Service Provider LNP Operations Flows

Code Opening Processes Figure 9

NPA-NXX Code Opening

Step	Description
1. NPA-NXX holder notifies NPAC SMS of NPA-NXX Code(s) being opened for porting.	<ul style="list-style-type: none">• The service provider responsible for the NPA-NXX being opened must notify the NPAC SMS via the SOA or LSMS interface within a regionally agreed to time frame.
2. NPAC SMS updates its NPA-NXX databases	<ul style="list-style-type: none">• NPAC SMS updates its databases to indicate that the NPA-NXX has been opened for porting.
3. NPAC SMS sends notice of code opening to all Service Providers via LSMS.	<ul style="list-style-type: none">• The NPAC SMS provides advance notice via the object creation message of the scheduled opening of NPA-NXX code(s) via the LSMS interface. Currently the NPAC SMS vendor is also posting the NPA-NXX openings to their secure (<i>see Tom M.</i>)

First TN/MDN Ported in NPA-NXX

Step	Description
1. NPAC SMS receives subscription create request for first TN/MDN in NPA-NXX	<ul style="list-style-type: none">• Service Provider notifies NPAC SMS to create subscription for the first TN/MDN in an NPA-NXX.
2. NPAC SMS sends notification of first TN/MDN ported to all service providers via SOA and LSMS	<ul style="list-style-type: none">• When the NPAC SMS receives the first subscription create request in an NPA-NXX, it will broadcast a “heads-up” notification to all service providers via both the LSMS and SOA interfaces. Upon receipt of the NPAC message, all service providers, within five (5) business days, will complete the opening for the NPA-NXX code for porting in all switches.